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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/720,273	12/21/2000	Thomas Eckel	MO-6034/LEA3	9983

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BAYER CORPORATION  
PATENT DEPARTMENT  
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EXAMINER

HOKE, VERONICA P

ART UNIT	PAPER NUMBER
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1714

4

DATE MAILED: 01/14/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.  
**98/720,273**

Applicant(s)  
**ECKEL ET AL**

Examiner  
**VERONICA HOKE**

Art Unit  
**1714**



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-5, 8-10, 12-15, and 19-22 is/are pending in the application.
- 4a) Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5, 8-10, 12-15, and 19-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

- 13) ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☒ All b) ☐ Some\* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892) 18) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 19) ☐ Notice of Informal Patent Application (PTO-152)
- 17) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 4 20) ☐ Other:

Art Unit: 1714

The preliminary amendment of December 21, 2000 has entered.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-5,8-10 ,12-15 and 19-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Murayama et al ( EP 0728811) taken with Wittmann et al ( 285) or ( 465) and Thomas et al.

Murayama et al as applicants acknowledge on page 1 of the specification, disclose members of the instant genus of organo substituted phosphazene compounds for flame proofing PC/Pstyrenic grafted rubber copolymer blends wherein the rubber has a glass transition temperature less than zero degrees Centigrade ( page 3, lines 19-20). There is no expressed limitation or preference for the type polymerization process by which the graft polymerized resin component is prepared. The presence of optional materials such as fillers, heat stabilizers, pigments, etc. is permitted ( page 5, lines 10-19).

Applicants utilize an ascorbic acid/hydro peroxide initiator system for the graft polymerization step. As related by the secondary references which originated as early as 1987 in their foreign

Art Unit: 1714

priority application derivations, it has long been known to utilize a solution of a hydro peroxide and ascorbic acid in an emulsion polymerization process generative of grafting styrene and acrylonitrile onto a polybutadiene, as the initiator system for the reaction. This is revealed by Thomas at col.1, lines 6-15, col.8, lines 14-47 and the preparation stated in col.14 as well as Wittmann (285) at col.3, line 44 et seq. and Wittmann et al (465) at col.4, lines 21-31 and col.8, lines 25 et seq. High yields of the grafted rubber is attributed to this particular initiator system's use.

Each and every one of these polymers is said to be amenable to the effects of conventional prescribed flame retardants. Whitmann et al (465) in particular relates standard phosphate, phosphine oxide or phosphonate flame retardant's presence in PC/Pstyrenic grafted resin blends in which the latter resin was prepared with this particular initiator system, optionally with Teflon. In as much as Murayama related (page 2) that phosphazenes can be used in lieu of phosphates of Wittmann's genus with the obviation of unneeded plasticizing exacerbated by their presence as well as avoiding Teflon drip inhibitors presence, it would be obvious based on the teachings of Thomas or Wittmann (either) to prepare the grafted styrene component of Murayama's phosphazene composition utilizing this initiator system in the absence of any unexpected results.

Applicants proffered comparative composition 2 on page 29 of the specification of grafted copolymer Bb which was prepared using potassium peroxydisulfate, an inorganic peroxide, in the absence of ascorbic acid is not persuasive of unexpected results in the ascorbic acid/ organic peroxide substitute use in preparing the same grafted copolymer because the former product

Art Unit: 1714

admittedly contains less grafted resin which is rather the actual polymer which presence is sought. Therefore the product contains residual ( unreacted) free SAN copolymer . Hence the polymer blends being compared are too disparate in constitution to provide a valid basis for expecting comparableness in the measured properties being evaluated such as impact strength. The latter property would be expectedly less in the comparative composition's use as the grafted styrenic /rubber copolymer since 1) the secondary references relate that a very high yield of grafted copolymer is obtained when using the dual ascorbic acid/organic peroxide blend and 2) conversely the low graft resin / high unreacted SAN copolymer content in the comparative product contains a thermoplastic copolymer which is a crystalline / rigid non elastomeric resin which presence would be expected to dilute the rubber copolymer's conferring of impact strength resistance.

  
VERONICA P. HOKE  
PRIMARY EXAMINER

vph

January 9, 2002

703-308-2444